

## Electronic Acknowledgement Receipt

<b>EFS ID:</b>	2881554
<b>Application Number:</b>	10619796
<b>International Application Number:</b>	
<b>Confirmation Number:</b>	7886
<b>Title of Invention:</b>	Sparse and efficient block factorization for interaction data
<b>First Named Inventor/Applicant Name:</b>	Francis X. Canning
<b>Customer Number:</b>	20995
<b>Filer:</b>	Lee W. Henderson/Segovia Phan
<b>Filer Authorized By:</b>	Lee W. Henderson
<b>Attorney Docket Number:</b>	CANNING.001CP2
<b>Receipt Date:</b>	19-FEB-2008
<b>Filing Date:</b>	15-JUL-2003
<b>Time Stamp:</b>	18:55:30
<b>Application Type:</b>	Utility under 35 USC 111(a)

### Payment information:

Submitted with Payment	yes
Payment Type	Credit Card
Payment was successfully received in RAM	\$240
RAM confirmation Number	4343
Deposit Account	111410
Authorized User	KNOBBE MARTENS OLSON AND BEAR

The Director of the USPTO is hereby authorized to charge indicated fees and credit any overpayment as follows:

Charge any Additional Fees required under 37 C.F.R. Section 1.16 (National application filing, search, and examination fees)

Charge any Additional Fees required under 37 C.F.R. Section 1.17 (Patent application and reexamination processing fees)

File Listing:					
Document Number	Document Description	File Name	File Size(Bytes) /Message Digest	Multi Part /.zip	Pages (if appl.)
1	Miscellaneous Incoming Letter	Transmittal_CANNING-001C P2.pdf	64330	no	2
			731c1d1438c9c7db3275a1c9a42da96e51a3422a		
Warnings:					
Information:					
2		Amendment_CANNING-001 CP2.pdf	810109	yes	16
			71388c5ab8904731336bcab7c0018aef01726c94		
	Multipart Description/PDF files in .zip description				
	Document Description		Start	End	
	Amendment - After Non-Final Rejection		1	1	
	Claims		2	7	
	Applicant Arguments/Remarks Made in an Amendment		8	16	
Warnings:					
Information:					
3	Information Disclosure Statement Letter	IDS_CANNING-001CP2.pdf	104613	no	3
			3abcf65890599ea6ce71232395a9518b41e6268a		
Warnings:					
Information:					
4	NPL Documents	NPL_CANNING-001A.pdf	318923	no	6
			bdebfb848a2cdeb6580926bdc0b784060e4f1aa535		
Warnings:					
Information:					
5	Fee Worksheet (PTO-06)	fee-info.pdf	8328	no	2
			7419fe4f19db60a9dbb5611979d8a9bf970525f7		
Warnings:					
Information:					
Total Files Size (in bytes):			1306303		

This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.

**New Applications Under 35 U.S.C. 111**

If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

**National Stage of an International Application under 35 U.S.C. 371**

If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

**New International Application Filed with the USPTO as a Receiving Office**

If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.